

Listing of Claims:

Claim 1. (previously presented) A switching process for transmitting user data packets, comprising the steps of:

providing a signaling unit having at least three line units, wherein the line units are optionally connected to one another in no fixed order and used to set up a connection for transmitting user data, wherein at least one of the line units uses a different external signaling protocol as compared to the other line units;

transmitting the user data in data packets via network nodes of a network;

terminating, via the line units, signaling toward a terminal device involved in the data transmission; and

directly passing on signaling messages, arriving at one of the at least one line units using a different external signaling protocol for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit, wherein the internal signaling maps the external signaling messages and identifies an appropriate line unit for directly passing on signaling messages using the optional connections given the protocol that is required.

Claims 2-3. (canceled).

Claim 4. (previously presented) A switching process for transmitting user data packets as claimed in claim 1, wherein the line units are connected via a switching network which transmits the internal signaling messages via one of channels, a bus system and a data network.

Claim 5. (original) A switching process for transmitting user data packets as claimed in claim 1, further comprising the step of:

controlling the connection of the line units according to a connection destination.

Claim 6. (original) A switching process for transmitting user data packets as claimed in claim 1, further comprising the step of:

using at least one signaling message to transmit an information element,

wherein the information element contains at least one of an address at which one of the terminal device and a network inter-working unit can receive data packets on the terminal device side, a port number which designates a receiving unit of one of the terminal device and the network inter-working unit, and a coding identification which designates a type of coding used sending data packets to one of the terminal device and the network inter-working unit.

Claim 7. (original) A switching process for transmitting user data packets as claimed in claim 1, further comprising the steps of:

using further line units for switching user data in a circuit-switched network; and

processing, via the further line units, at least similar internal signaling messages as the line units involved in setting up the connection for the transmission of user data in data packets.

Claim 8. (original) A switching process for transmitting user data packets as claimed in claim 1, wherein at least one of the line units involved in the connection set up operates toward the outside in accordance with an ISUP protocol.

Claim 9. (original) A switching process for transmitting user data packets as claimed in claim 1, wherein at least one of the line units involved in the connection set up operates toward the outside in accordance with a supplemented ISUP protocol, and the process further comprises the step of using at least one information element for transmitting at least one of an address at which one of the terminal device and a network inter-working unit in the packet-switched network can receive data packets, a port number which designates a receiving unit of one of the terminal device and the network inter-working unit, and a coding identification which designates a type of coding used when sending data packets to one of the terminal device and the network inter-working unit.

Claim 10. (original) A switching process for transmitting user data packets as claimed in claim 1, wherein at least one of the line units involved in the connection set up terminates the signaling in accordance with a signaling protocol for a packet-transmitting data network.

Claim 11. (original) A switching process for transmitting user data packets as claimed in claim 10, wherein the signaling protocol is a protocol for signaling with a terminal device, the protocol being one of an H.323 protocol, an SIP protocol, and an MGCP protocol.

Claim 12. (original) A switching process for transmitting user data packets as claimed in claim 10, further comprising the steps of:

transmitting data packets, via the signaling protocol, on a lower protocol layer; and

transmitting signaling messages, via the signaling protocol, originally defined for a circuit-switch transmission network on an upper protocol layer.

Claim 13. (original) A switching process for transmitting user data packets as claimed in claim 1, wherein at least one of the line units involved in the connection set up involves a control unit and a network inter-working unit in the switching operation, and wherein, in the network inter-working unit, after the connection set up, at least one event occurs between removing the user data of the connection from time slots and distributing the user data among data packets, and disassembling the user data of the connection from received data packets and passing the user data on in time slots.

Claim 14. (original) A switching process for transmitting user data packets as claimed in claim 13, wherein the at least two line units involve different control units.

Claim 15. (original) A switching process for transmitting user data packets as claimed in claim 1, wherein one line unit contains at least two component units which exchange internal signaling messages with one another.

Claim 16. (original) A switching process for transmitting user data packets as claimed in claim 10, wherein the user data are passed on in one of a connection list mode by network nodes of the packet-transmitting network in accordance with an IP protocol, and a connection-oriented mode by the network nodes of the packet-transmitting network in accordance with the ATM protocol.

Claims 17-19. (canceled).

Claim 20. (new): A switching signaling unit for transmitting user data packets, comprising:

at least three line units, wherein the line units are optionally connected to one another in no fixed order and used to set up a connection for transmitting user data, wherein at least one of the line units uses a different external signaling protocol as compared to the other line units, wherein the line units terminate signaling toward a terminal device involved in the data transmission;

a device for transmitting the user data in data packets via network nodes of a network;
and

means for directly passing on signaling messages, arriving at one of the at least one line units using a different external signaling protocol for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit, wherein the internal signaling maps the external signaling messages and identifies an appropriate line unit for directly passing on signaling messages using the optional connections given the protocol that is required.

Claim 21. (new): A program stored in a memory module for a signaling unit having at least three line units, wherein the line units are optionally connected to one another in no fixed order and used to set up a connection for transmitting user data, wherein at least one of the line units uses a different external signaling protocol as compared to the other line units, which, when executed with the aid of a processor, the program performs the steps of:

transmitting the user data in data packets via network nodes of a network;

terminating, via the line units, signaling toward a terminal device involved in the data transmission; and

directly passing on signaling messages, arriving at one of the at least one line units using a different external signaling protocol for switching of the data packets, to another of the line units with the aid of internal signaling messages defined for the signaling unit, wherein the internal signaling maps the external signaling messages and identifies an appropriate line unit for directly passing on signaling messages using the optional connections given the protocol that is required.